

Section 10 — The Proton Decay Coupler (ϕ^7 Mode)

Section 10 formally defines the Proton Decay-Coupler — the ϕ^7 torsional resonance mode within the Dual-Decad system. This mode governs all proton decay timing, all photon-like proton states, and the synchronized ϕ^7 resonance between proton and electron systems. The ϕ^7 coupler is central to FUNt because it unifies atomic decay, photon emission, and proton–electron resonance into a single harmonic criterion.

10.1 Definition of the Decay Coupler (ϕ^7)

- The decay coupler is the ϕ^7 torsional threshold in the proton.
- At ϕ^7 , torsional pressure matches the photon-emissive band seen in hydrogen.
- This creates the universal decay-timing condition shared across particles.
- [Insert diagram here]

10.2 Proton Torsional Pressure at ϕ^7

- Proton torsion rises approximately ϕ^7 times above baseline ϕ^0 .
- This pressure induces the resonant condition required for decay.
- Matches electron ϕ^7 buoyant-photon threshold.
- [Insert diagram here]

10.3 Electron–Proton ϕ^7 Synchrony

- Electron enters photon-like ϕ^7 mode simultaneously.
- Defines the hydrogen Lyman- α resonance.
- Electrons ‘mirror’ the proton’s torsional state at ϕ^7 .
- [Insert diagram here]

10.4 Decay Timing Law

- Decay timing occurs when ϕ^7 harmonic coherence is reached.
- Neutron β -decay occurs when ϕ^7 – ϕ^8 crossing happens internally.
- Proton decay (rare) corresponds to $\phi^7 \rightarrow \phi^9$ inversion band.
- [Insert diagram here]

10.5 Hydrogen ϕ^7 Signature (Lyman- α)

- Hydrogen's most intense spectral peak corresponds to ϕ^7 .

- Matches photon emission from the electron $\varphi^7 \rightarrow \varphi^0$ collapse.
- Proton torsion defines the emission window shape.
- [Insert diagram here]

10.6 Universal ϕ^7 Coupler Across All Particles

- Electrons: φ^7 = photon-like drift inversion.
- Protons: φ^7 = decay torsional coupler.
- Neutrons: φ^7 = β -decay trigger resonance.
- This unifies decay, tunneling, and photon emission under one constant.
- [Insert diagram here]

10.7 Scalar Inversion Beyond ϕ^7

- $\varphi^7 \rightarrow \varphi^8$: Mirror-state (positron/electron dual mode).
- $\varphi^8 \rightarrow \varphi^9$: Scalar-field inversion.
- Marks the boundary where particles lose classical identity.
- [Insert diagram here]